REMARKS

Reconsideration and further examination are respectfully requested.

Rejections under 35 U.S.C. §112, first paragraph

Claims 1 and 20 were rejected under 35 U.S.C. §112, first paragraph for failing to comply with the written description requirement. In particular, the Examiner states, at page 2 of the office action:

"… Regarding claim 1, the amended subject matter "selectively modifying a priority of the traffic in response to…" as disclosed in lines 5-9 of claim 1 is not properly described explicitly or implicitly in the specification. The specification does not indicate and demonstrate clearly how this "selectively modifying a priority of the traffic" is to be performed. Regarding claim 20, the amended subject matter "selectively modifying a priority of the traffic using parameter information …" as disclosed in lines 7-10 of claim 20. The specification does not indicate and demonstrate clearly how this "selectively modifying a priority of the traffic using parameter information" be performed…."

Applicants respectfully disagree and submit that language enabling the limititations can be found both in the specification and the claims as originally filed. For example, the Examiner is referred to paragraph [0047] of the published version of this application (US 20020021701), which describes:

"…Further, although the modification of various queues in this way has been described herein, the invention is not so limited and other embodiments also exist. For example, traffic can be filtered based on its type--source (e.g., source MAC address or source VLAN), ingress port, destination (e.g., destination MAC address or destination IP address), egress port, protocol (e.g.,

FTP, HTTP) or other hardware-supported filters. *In one embodiment, filtering of unicast traffic is determined based on destination parameters such as egress port, destination MAC address or IP address, while filtering of multicast traffic is determined based on source parameters such as ingress port, source MAC address or source IP address. …*"

Applicants claim 1 recites "…In a packet forwarding device, a method comprising … monitoring types of packet traffic received in the packet forwarding device … determining whether a type of packet traffic received in the packet forwarding device is a unicast type or a multicast type; and when the type of packet traffic is unicast type, selectively modifying a priority of the traffic in response to a destination parameter of the packet traffic; and when the type of packet traffic is multicast type, selectively modifying a priority of the traffic in response to a source parameter of the packet traffic…"

With regard to the limitation of 'selectively modifying a priority', it is noted that the claim language clearly states "…the step of selectively modifying the priority includes performing at least one of changing assignment of the packet traffic from a queue having a first priority to a queue having a second priority, dropping packets of the packet traffic, copying packets of the packet traffic, and diverting packets of the predetermined type in the packet traffic…" The cited language has been included in the claims since initial filing of the application. Applicant respectfully submits that the steps are clearly described in the specification (see, for example, paragraph [0005] and the Abstract, as well as paragraph [00049] which is replicated below:

"… Still further, dynamic filtering decisions may be made on how to process packets other than choosing whether they should go to a priority or best effort queue; *for example, they may be dropped or copied, or traffic of a specific type as described above may be diverted.* Packet headers may be modified, and use of differentiated services (DS), quality of service (QoS), TOS, TTL, destination and the like is possible as long as it is supported by the hardware.

The configurability of filtering and subsequent processing in the invention is, in fact, limited only by the hardware and numerous possibilities for filtering and subsequent processing of traffic other than those described herein will be readily apparent to those skilled in the art after reading and understanding this application…"

Accordingly, Applicant respectfully submits that sufficient support is provided in Applicants' specification for the claimed invention, and request that the rejection under 35 U.S.C. §112, first paragraph be withdrawn.

Objections to the claims

Claim 13 was objected to for various informalities. Applicant has amended the claim to remove the informality and requests that the rejection be withdrawn. The Examiner is thanked for the thorough examination of the claims.

Rejections under 35 U.S.C. §102

Claims 1, 3-10, 13-15, 17 and 19-24 were rejected under 35 U.S.C. §102(e) as being anticipated by Hoffman.

Hoffman:

Hoffman describes a system and method for multi-layered network element for forwarding received packets to appropriate output ports, while detecting and handling congestion at the output ports. (See Hoffman, column 5, lines 3-7).

Hoffman describes, at column 5:

> "…The switching element is configured to output packets to a network through output ports. The switching element includes at least one variable-length output queue that queues packets for output, having storage locations for packet pointers. Each queue has associated with it a start register that stores a pointer to the storage location at the front of the queue and an end register that stores a pointer to the storage location at the end of the queue as determined by the number of storage location. … The output queues also have associated with each, a programmable threshold register that stores a threshold pointer to a storage location between the location represented by the start register and the location

represented by the end register.

Threshold logic outputs a congestion signal when the value in the next free register represents a storage location logically located between the location pointed to key the threshold register and including the storage location pointed to by the end register. In response to the congestion signal, random discarding logic randomly selects packets to discard, so that once the threshold is exceeded, incoming packets are randomly discarded, using a packet discarding algorithm, such as Random Early Discard (RED). Capacity logic outputs a queue full signal to the CPU when queue becomes full…."

The Examiner states that Hoffman teaches the steps claim 1, namely "determining whether a type of packet traffic received in the packet forwarding device is a unicast type or a multicast type; and when the type of packet traffic is unicast type, selectively modifying a priority of the traffic in response to a destination parameter of the packet traffic; and when the type of packet traffic is multicast type, selectively modifying the priority of the traffic in response to a source parameter of the packet traffic determining of selectively modifying priority of the packet…" at column 16 and 17.

However, the portions of Hoffman cited by the Examiner merely use the terms multicast and unicast, but do not recite the limitations of the claimed invention. For example, column 16, lines 62-67 through column 17 lines 1-9 states:

"…Entries for layer 3 may include additional information. The entry may indicate that only the first 64 bytes of the packet should be sent to the processor 32 for subsequent processing. The entry may indicate whether the packet is part of a multicast routing. If so, then the output port 50i should decrement the header checksum, forward the packet to the indicated output ports 56, and indicate that the output port 561 need to replace the layer 2 source address of the packet the output port 56i 's MAC address. Other types of header modifications will be readily apparent to those skilled in the art to implement proper routing.

The entry in the associated memory 42 may also include the next hop destination address to be used to replace the incoming destination in unicast routing. In a unicast route, the incoming packet would have had its destination address as the multi-layer network element 12..."

No mention or suggestion of the claimed limitations of 'selectively modifying the priority' as recited in the claims of the present invention is taught or suggested by this passage.

Column 15, lines 60-67 mentions the consideration as to whether 'any priorities should be added on the output port…', a determination which is made based on the header.

Hoffman mentions in the abstract that priorities of flows may be altered in response to queue fullness. However, there is no mention or suggestion of selectively modifying the priority of the flow based on different parameters for unicast and multicast packets. Accordingly, for at least this reason, claim 1 as well as independent claims 13 and 20 are patentably distinct over Hoffman and it is requested that the rejection be withdrawn.

Dependent claims 3-10, 12, 14-19 and 20-24 serve to further limit their parent independent claims and are allowable for at least the same reason as their parent claims.

Rejections under 35 U.S.C. §103

Claims 11, 16 and 18 were rejected under 35 U.S.C. as being unpatentable over Hoffman in view of Bowman-Amuah (US 6,427,132)

Bowman-Amuh:

Bowman-Amuh is directed at "…a system, method and article of manufacture are provided for demonstrating e-commerce capabilities on a network via a simulation. Data connectivity is provided over a network between a simulated user, a simulated product distributor, a simulated product vendor, and a simulated financial service provider. An electronic catalog is displayed over a network that shows a product for sale by the simulated product vendor. The simulated user is shown browsing the electronic catalog on the network. Further, a consultation over the network, relating to the product for sale shown in the electronic catalog, is depicted between the simulated user and the simulated product distributor. Selection of the product by the simulated user is illustrated. The simulated user is portrayed to authorize payment alter an on-line review of an account of the user…" (Bowman-Amuh, Abstract)

The Examiner appears to rely on Bowman-Amuh as teaching the limitation of using the FTP protocol, and states :

'It would have been obvious … to include a protocol of traffic includes FTP such as that taught by Bowman-Amuh in order to provide a system, method and article of manufacture are provided for demonstrating ecommerce capabilities on a network via a simulation as suggested by Bowman-Amuh…'

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicant respectfully submits that the combination of Hoffman and Bowman-Amuh fails to satisfy this burden for at least the below reasons

No motivation for the modification suggested by the Examiner

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet,* 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

The Examiner appears to attempt to combine two non-analogous references to meet the claimed invention. Hoffman is directed at a method and apparatus of controlling queue congestion, while Bowman-Amuh is concerned with ecommerce. Applicants respectfully submit that one would not be motivated to utilize teachings of non-anologous ecommerce art in Hoffman.

In addition, exact motivation provided by the Examiner is unclear; it appears that the Examiner is stating that it one would be motivated to provide ecommerce simulations (as taught by Bowman), in the network of Bowman. Such a motivation does not appear to involve the teachings of Hoffman.

It is noted that the motivation that should be provided is one that would motivate one, at the time of the invention, to modify the references *in the particular manner claimed.*

"Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." Dembiczak, 175 F.3d at 999; see also Ruiz, 234 F.3d at 665 (explaining that the temptation to engage in impermissible hindsight is especially strong with seemingly simple mechanical inventions). This is because "[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight." Dembiczak, 175 F.3d at 999. Therefore, we have consistently held that a person of ordinary skill in the art must not only have had some motivation to combine the prior art teachings, but some motivation to combine the prior art teachings in the particular manner claimed. See, e.g., In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) ("Particular findings must be made as to the reason the skilled artisan, with no

knowledge of the claimed invention, would have selected these components for combination in the manner claimed." (emphasis added)); In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998) ("In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." (emphasis added)).

Accordingly, for at least the reason that no motivation can be found for the modification suggested by the Examiner, it is requested that the rejection be withdrawn.

Combination neither discloses or suggests the claimed invention

Applicants have described at length above the inadequacies of Hoffman with regard to teaching the claims of the present invention. Bowman-Amuh, which deals with the simulation of e-commerce, does not overcome the inadequacies of Hoffman. Thus, for at least the reason that the combination of references fails to teach or suggest every limitation of the claims, it is requested that the rejection of claims 11, 16 and 18 be withdrawn.

Conclusion:

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Applicants' Attorney at the number listed below so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date

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